AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Original) A genetic vaccine construct comprising an avipox virus vector which incorporates and, on administration to a subject, expresses in a cell of said subject, a sequence of nucleotides encoding a xenogeneic prostate specific polypeptide or a derivative or analogue thereof, wherein said virus vector does not productively infect said subject.

2. (Original) A genetic vaccine construct comprising an avipox virus vector which incorporates and, on administration to a subject, expresses in a cell of said subject, a sequence of nucleotides encoding a xenogeneic prostate specific polypeptide or a derivative or analogue thereof, and a sequence of nucleotides encoding an immunostimulatory polypeptide, wherein said avipox virus vector does not productively infect said subject.

3. (Original) The genetic vaccine construct of claim 1 or 2, wherein the prostate specific polypeptide is prostatic acid phosphatase or a derivative or analoque thereof.

4. (Currently amended) The genetic vaccine construct of ~~any one of claims 1 to 3~~claim 3, wherein the subject is a human subject.

5. (Original) The genetic vaccine construct of Claim 4, wherein the xenogeneic prostate specific polypeptide is rodent prostatic acid phosphatase.

6. (Original) The genetic vaccine construct of claim 5, wherein the rodent prostatic acid phosphatase is rat prostatic acid phosphatase.

7. (Original) The genetic vaccine construct of claim 2, wherein the immunostimulatory polypeptide is a cytokine.

8. (Original) The genetic vaccine construct of claim 7, wherein the cytokine is one or more of IL-2, IL-12, TNFα, IFNγ, IL-6, IL-4, IL-7 or GM-CSF.

9. (Original) The genetic vaccine construct of claim 8, wherein the cytokine is one or more of IL-2, IFNγ or IL-12.

10. (Original) The genetic vaccine construct of claim 9, wherein the cytokine is IL-2.

11. (Currently amended) The genetic vaccine construct of ~~any one of claims 1 to 10~~claims 1 or 2, wherein the avipox virus vector is a fowlpox virus vector.

12. (Currently amended) A composition comprising the genetic vaccine construct according to ~~any one of claims 1 to~~ 11claims 1 or 2.

13. (Currently amended) A composition consisting essentially of the genetic vaccine construct according to ~~any one claims 1 to 11~~claims 1 or 2.

14. (Currently amended) The composition of claim 12~~ or 13~~, wherein expression products of said genetic vaccine construct stimulate a prostate cell specific immune response.

15. (Original) The composition of claim 14, wherein prostate cell specific immune response is a PAP specific immune response.

16. (Currently amended) The composition of claim 14~~ or 15~~, wherein the expression products of the genetic vaccine construct stimulate autoimmune prostatitis.

17. (Currently amended) A recombinant vector for use in making the genetic vaccine construct according to ~~any one of claims 1 to 11~~claims 1 or 2 comprising:

i) avipox virus vector nucleic acid sequences comprising sites for homologous recombination with an avipox virus vector;

ii) one or more promoters; and

iii) a sequence of nucleotides encoding a xenogeneic prostate specific polypeptide.

18. (Currently amended) A recombinant vector for use in making the genetic vaccine construct according to ~~any one of claims 2 to 11~~claim 2 comprising:

i) avipox virus vector nucleic acid sequences comprising sites for homologous recombination with an avipox virus vector;

ii) one or more promoters;

iii) a sequence of nucleotides encoding a xenogeneic prostate specific polypeptide; and

iv) a sequence of nucleotides encoding an immunostimulatory polypeptide.

19. (Currently amended) A eukaryotic cell infected with a genetic vaccine construct according to ~~any one of claims 1 to 11~~claims 1 or 2.

20. (Currently amended) An antibody capable of acting as a marker for the genetic vaccine construct which antibody recognizes epitopes uniquely formed in expression products of the genetic vaccine construct according to ~~any one of claims 1 to 11~~claims 1 or 2.

21. (Currently amended) A nucleic acid probe comprising a complementary form of a contiguous sequence of nucleotides of all or part of the genetic vaccine construct according to ~~any one of claims 1 to 11~~claims 1 or 2 which specifically recognizes said genetic vaccine construct under appropriate hybridization conditions.

22. (Original) A method for stimulating or otherwise enhancing a prostate cell specific immune response in a subject comprising administration to the subject of an effective amount of a composition comprising a genetic vaccine construct comprising an avipox virus vector which incorporates and, on administration to a subject, expresses in a cell of said subject, a sequence of nucleotides encoding a xenogeneic prostate specific polypeptide or a derivative or analogue thereof, for a time and under conditions sufficient for expression products of said genetic vaccine construct to stimulate or otherwise enhance a prostate cell specific immune response, and wherein said avipox virus does not productively infect said subject.

23. (Original) A method for stimulating or otherwise enhancing a prostate cell specific immune response in a subject comprising administration to said subject of an effective amount of a composition comprising a genetic vaccine construct comprising an avipox virus vector which incorporates and, on administration to a subject, expresses in a cell of said subject, a sequence of nucleotides encoding a xenogeneic prostate specific polypeptide or a derivative or analogue thereof and a sequence of nucleotides encoding an immunostimulatory polypeptide, for a time and under conditions sufficient for expression products of said genetic vaccine construct to stimulate or otherwise enhance a prostate cell specific immune response, and wherein said avipox virus vector does not productively infect said subject and a sequence of nucleotides encoding an immunostimulatory polypeptide.

24. (Original) A method for immunotherapy and/or immunoprophylaxis of prostate cancer comprising administration of an effective amount of a composition comprising a genetic vaccine construct comprising an avipox virus vector which incorporates

and, on administration to a subject, expresses in a cell of said subject, a sequence of nucleotides encoding a xenogeneic prostate specific polypeptide or a derivative or analogue thereof, wherein said vector does not productively infect said subject, and wherein expression products of said vector stimulate a prostate cell specific immune response effective in the treatment and/or prophylaxis of prostate cancer.

25. (Original) A method for immunotherapy and/or immunoprophylaxis of prostate cancer comprising administration of an effective amount of a composition comprising a genetic vaccine construct comprising an avipox virus vector which incorporates and, on administration to a subject, expresses in a cell of said subject, a sequence of nucleotides encoding a xenogeneic prostate specific polypeptide or a derivative or analogue thereof, and a sequence of nucleotides encoding an immunostimulatory polypeptide, wherein said vector does not productively infect said subject, and wherein expression products of said vector stimulate a prostate cell specific immune response effective in the treatment and/or prophylaxis of prostate cancer.

26. (Original) The method of any one of claims 22 to 25, wherein the prostate specific polypeptide is a prostatic acid phosphatase or a derivative or analogue thereof and the prostate cell specific immune response is a PAP specific response.

27. (Currently amended) A method of ~~any one of claims 22 to 26~~claim 26, wherein the subject is a human.

28. (Original) The method of claim 27, wherein the prostate specific polypeptide is rodent prostatic acid phosphatase.

29. (Original) The method of claim 28, wherein the rodent prostatic acid phosphatase is rat prostatic acid phosphatase.

30. (Original) The method of claim 23 or 25, wherein the immunostimulatory polypeptide is a cytokine.

31. (Original) The method of claim 29, wherein the cytokine is one or more of cytokines IL-2, IL-12, TNFα, IFNγ, IL-6, IL-4, IL-7 or GM-CSF.

32. (Original) The method of claim 31, wherein the cytokine is one or more of cytokines IL-2, IFNγ and/or IL-12.

33. (Original) The method of claim 32, wherein the cytokine is IL-2.

34. (Currently amended) The method of any one of claims 22 to ~~33~~25, wherein the avipox virus vector is a fowlpox virus vector.

35-47. (Cancelled)